

CLAIMS:

1. Circuit arrangement for operating a lamp load comprising
- input terminals for connection to a supply voltage source,
 - a series arrangement I comprising a first switching element and a second switching element and connecting the input terminals,
 - 5 – a control circuit coupled to respective control electrodes of the first switching element and the second switching element for controlling the conductive state of the first and the second switching element,
 - a series arrangement II comprising a first circuit element A and a second circuit element B and connecting the input terminals,
 - 10 – a first load circuit comprising a first ballast inductor and first lamp connection terminals and connecting a terminal N1 of the series arrangement I between the switching elements to a terminal of the series arrangement II between the first circuit element A and the second circuit element B,
- characterized in that the circuit arrangement comprises
- 15 – a series arrangement III comprising terminal N1, a first diode D1 and a second diode D2 and connecting the first switching element and the second switching element, terminal N1 being situated between first diode D1 and second diode D2,
 - a series arrangement IV comprising a third diode D3 and a fourth diode D4 and connecting the first switching element and the second switching element,
 - 20 – a fifth diode D5 shunting the first switching element and diode D1,
 - a sixth diode D6 shunting the first switching element and diode D3,
 - a seventh diode D7 shunting the second switching element and diode D2,
 - an eighth diode D8 shunting the second switching element and diode D4,
 - a second load circuit comprising a second ballast inductor and second lamp connection
 - 25 terminals and connecting a terminal N2 of the series arrangement IV, situated between the third diode D3 and the fourth diode D4 to a terminal of the series arrangement II between the first circuit element A and the second circuit element B.

2. Circuit arrangement according to claim 1, wherein the first circuit element A and the second circuit element B each comprise a capacitor.

3. Circuit arrangement according to claim 1, wherein the first circuit element
5 comprises a third switching element and the second circuit element comprises a fourth switching element, the control circuit being coupled to respective control electrodes of the third switching element and the fourth switching element for controlling the conductive state of the third and the fourth switching element.

10 4. Circuit arrangement as claimed in claim 2, wherein the control circuit is equipped with means for alternately at a low frequency operating the circuit arrangement in a first and a second operating state, wherein in the first operating state the first switching element is rendered conductive and non-conductive at a high frequency while the second
15 switching element is maintained in a non-conductive state, and wherein in the second operating state the second switching element is rendered conductive and non-conductive at a high frequency while the first switching element is maintained in a non-conductive state.

5. Circuit arrangement as claimed in claim 3, wherein the control circuit is equipped with means for alternately at a low frequency operating the circuit arrangement in a
20 first or a second operating state, wherein in the first operating state the second and the third switching elements are maintained non-conductive while the fourth switching element is maintained conductive and the first switching element is rendered conductive and non-conductive at a high frequency, and wherein in the second operating state the third switching
25 element is maintained conductive while the second switching element is rendered conductive and non-conductive at a high frequency and the first and the fourth switching elements are maintained non-conductive.

6. Circuit arrangement as claimed in claims 4 and 5, wherein the circuit
30 arrangement is equipped with a power control loop for controlling the average value of the total power consumed by both lamps at a desired value by adjusting the time lapse during which the first switching element is rendered conductive during each high frequency period in the first operating state and during which the second switching element is rendered conductive during each high frequency period in the second operating state.